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ABSTRACT

Employment of seasonal labor in Michigan during 1969 reached a peak in July, with an estimated 60,400 seasonal workers employed. Approximately 113,500 workers were employed at some time in cultivation and harvest of Michigan's crops during the 1969 season. Many workers were employed in only 1 activity or quit before its completion, but most completed 1 or 2 activities. Although most of the migrant labor in Michigan originated in 3 states (Texas, Florida, and Louisiana, in that order), 28 other states and Puerto Rico contributed to the migrant pool. All Michigan areas with agricultural labor had day-care centers and educational programs for children 3 months through 15 years. Basic education for adult migrants was offered at 2 skill centers operated as part of a coordinated Manpower Development Training program. All Michigan areas with significant migrant concentrations had programs to provide some health services, most often in the form of health clinics operated by county health departments. Public agencies and private organizations were involved in providing welfare assistance to the migrants. These welfare activities ranged from providing food and clothing to assisting in securing housing for those settling out of the migrant stream. With 9 other states, Michigan participated in the Texas Migrant Experimental and Demonstration Project to determine the manpower and supportive services needed to improve employability of selected groups and to enhance their earning power and living standards. (JH)

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1969 POST SEASON
FARM LABOR AND RURAL MANPOWER REPORT

Prepared by

Farm Labor and Rural Manpower Service Section

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A
Michigan Employment Security Commission
Publication

MICHIGAN 1969 ANNUAL REPORT
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I. ADMINISTRATION

A. ORGANIZATION

During 1969 there were several minor changes in the organizational structure. Some Experimental and Demonstration Projects were also tried.

In cooperation with other concerned state agencies and organizations, a Farm Placement Specialist was assigned to a Migrant Information Center at Berrien Springs. This was an E & D Project recommended as a one-stop office for migrants in search of manpower and/or supportive services by several agencies and organizations interested in migrant labor problems. Staffing was accomplished by transferring a seasonal position formerly assigned to the camper mobile office unit. However, a Post-Season Analysis does not justify the continuation of supplying a Farm Placement Specialist for this project as he only made six referrals to jobs and seven to other agencies during the six week period he was officially stationed there in 1969.

Upon request from the Hastings City Council and Chamber of Commerce for Manpower Services in their community, a one day a week itinerant office was established to make these services available. This is on a six-minth trial basis. Barry County in which Hastings (pop. 6,375) is located is predominantly rural. The nearest Manpower Office servicing the area is located some 40 miles away in Grand Rapids. This would appear to be an ideal area to initiate the Rural Manpower concept, however, there is some doubt at this time about the value of a one day a week operation. To staff the project a Farm Placement Specialist from Holland was assigned to handle the project on an itinerant basis.

Sanilac County in the thumb area north of Port Huron is a large producer of pickling cucumbers, sugar beets and other row crops. Located within the county and especially around the Croswell area are several processing and agriculturally related industries. Because of the remoteness (about 30 miles) from the nearest branch office at Port Huron, difficulties have been experienced in the past in providing sufficient employment service assistance to the area. To alleviate this condition a seasonal office was established at Croswell. Positions formerly allocated at Bear Lake and Imlay City were transferred to staff the office. However, at the time of the closing of the office for the season it was apparent that much unfinished business remained and that manpower services on a continuing basis are needed in this area.

B. SPECIAL PROJECTS

With nine other states Michigan participated in a Texas Migrant E & D Project to study and determine the manpower and/or supportive services required by 750 pre-selected Texas migrant families from four counties in the lower Rio Grande River Valley. Of the 750 total 150 families were assigned to Michigan, of which about 75, or half, went to the Benton Harbor area and the remainder to the Traverse City area. The goals and objectives of the program were to determine through outreach and intensive interviews the manpower and/or supportive services needed to improve the employability of the selected groups, and to enhance their earning power and living standards.

A project coordinator directed the operation from the State Office. Field staff consisted of two teams of three bilingual interviewers each with a team captain in charge. A team was assigned to each of the Michigan target areas at Benton Harbor and Traverse City. It was discovered that not all suggested innovations proved to be acceptable or workable.

Many families lost interest in seeking supportive assistance when they discovered that they had to take time off from work to file for such assistance and the loss in earnings appeared to be greater than the gain from the supportive service made available to them. All of the experience gained is being analyzed in the hope of remedying similar problems in the future. A more detailed coverage of this project may be found in another section of this report entitled, "Highlights of The 1969 Season."

A smaller communities project has been operating in Ludington (Mason County) since the beginning of the year and is scheduled to move out in late December or in early January of the new year. To assure continuity of manpower services to the employers and applicants in the area, the operation is to be absorbed into the Farm Labor and Rural Manpower Service operation in accordance with the emerging concept of making manpower services available to residents in rural areas. The new concept provides for manpower services to all applicants and employers in a rural area and not to agricultural workers and employers only as was the case in the historical Farm Labor Service. So that the transition may be as orderly as possible, the Farm Placement Specialist previously assigned to the Ludington Farm Labor Trailer Office on a seasonal basis has been re-assigned to the new program on a year-round basis and stationed in Ludington proper. Realizing that it would be almost physically impossible for one man to handle the operation alone, an additional position vacancy on a year-round basis has been established for this office.

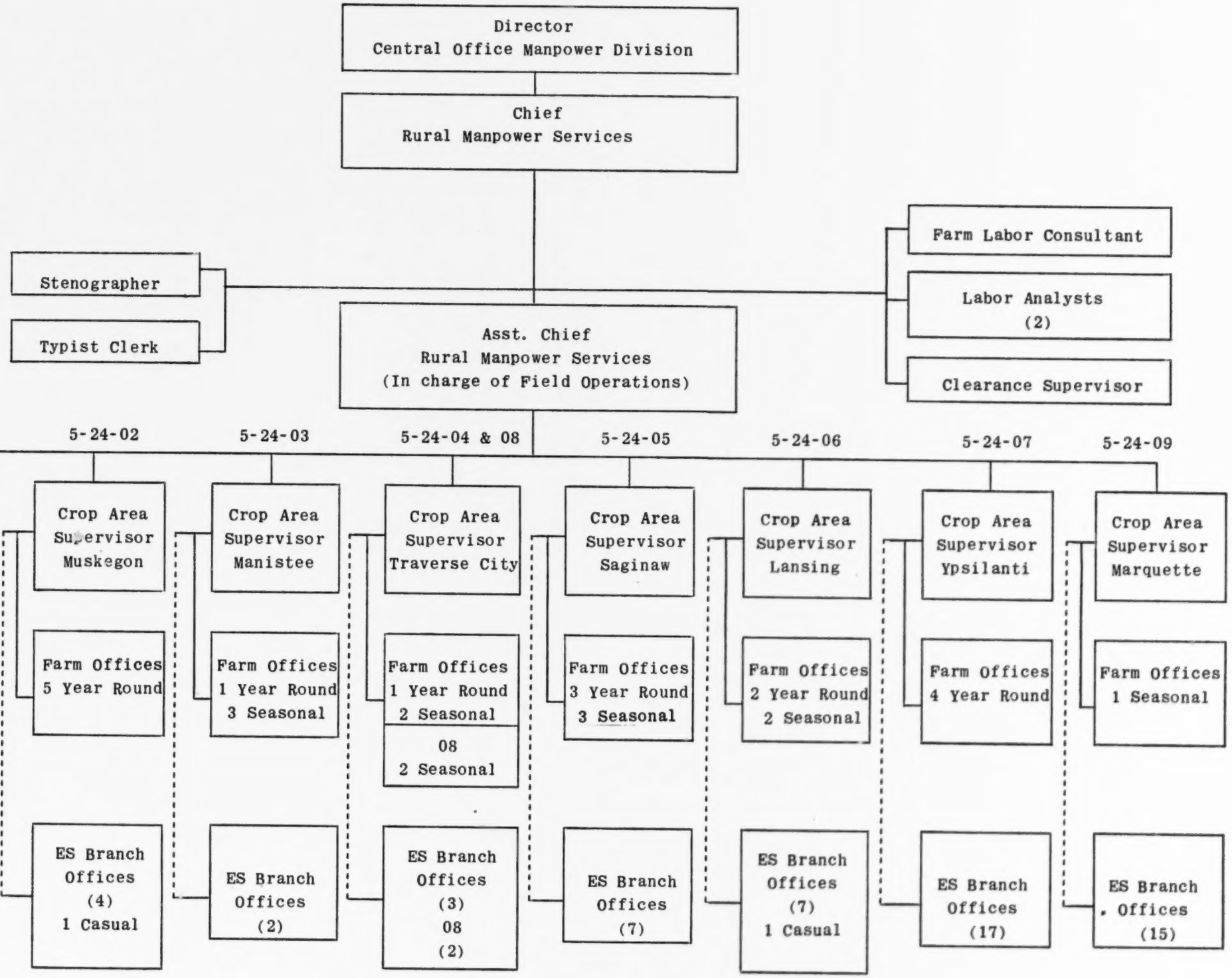
C. TRAINING

To acquaint and assist the newly employed Texas Migrant E & D staff with employment services and the methods of operations, training was conducted during the week of June 9 - 13. Included in the agenda was the History and Development of Employment Security Programs, Civil Rights Orientation, Public Relations, Employment Service Philosophy, Role and Responsibility of the Farm Placement Specialist in the E & D program, Equal Employment Opportunity, Interviewing Techniques recognizing counseling needs, establishing relationships with community organizations, agencies and employers.

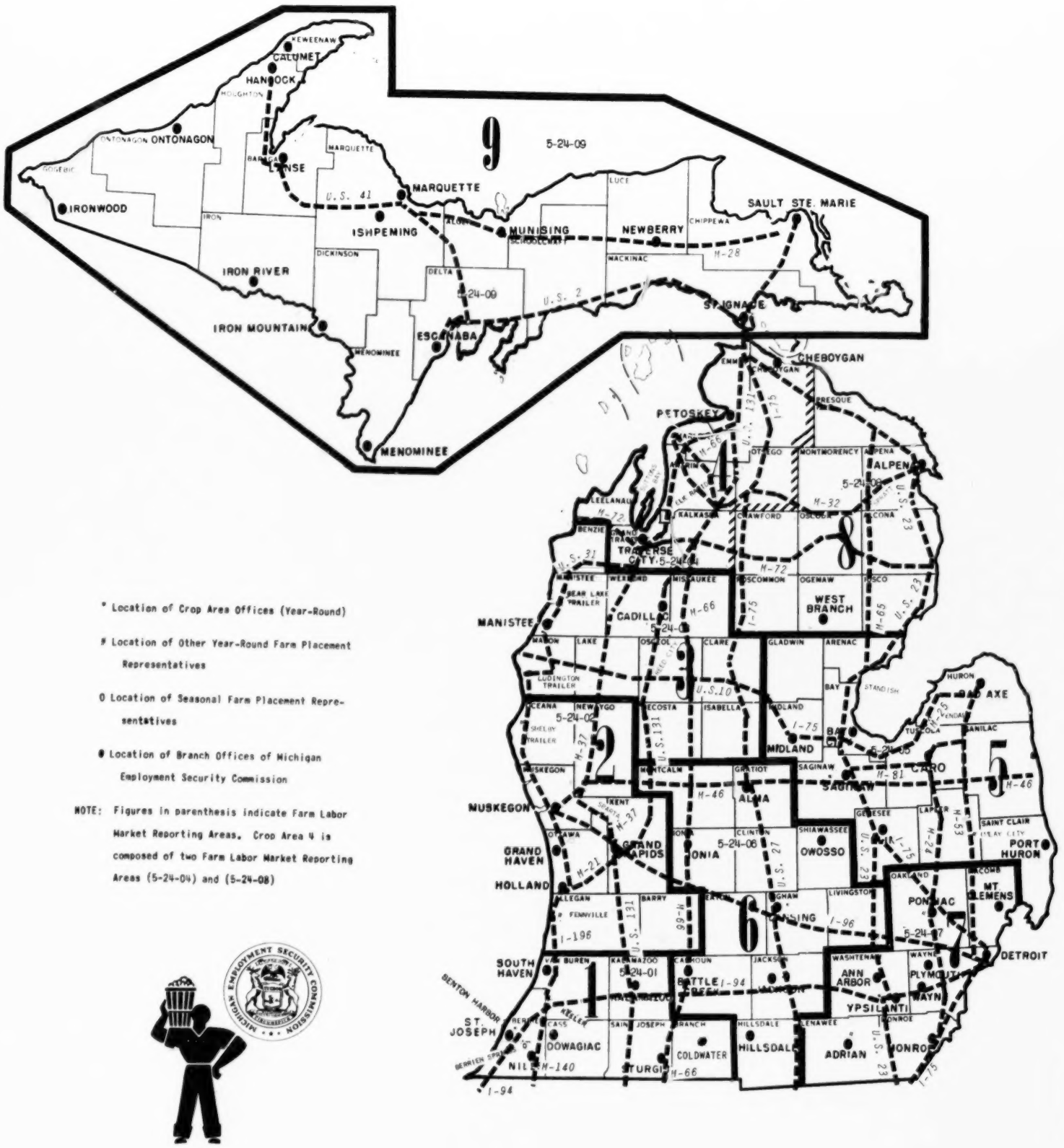
As the Rural Manpower concept developed advocating manpower service to all in a rural community and not to just agricultural applicants and workers, the need for additional training was recognized. Beginning on October 24, twenty Farm Placement Specialists were involved in three weeks of regular and intensified employment service training. The first week was in classroom type training at the State Office with State Office staff people as instructors; the second week was spent in "On The Job Training" working in a branch office; the third week was again in class training at the State Office. A group of twenty is scheduled for January in the new year and a third group consisting of long term seasonal people and new E & D staff hire-ins is contemplated for training in early spring.

Field training in new methods, procedures and new programs are on on-going process involving State Office staff and Crop Area Supervisors.

ORGANIZATION CHART



CROP AND AGRICULTURAL REPORTING AREAS
OF RURAL MANPOWER SERVICE PROGRAM



* Location of Crop Area Offices (Year-Round)

\# Location of Other Year-Round Farm Placement Representatives

0 Location of Seasonal Farm Placement Representatives

● Location of Branch Offices of Michigan Employment Security Commission

NOTE: Figures in parenthesis indicate Farm Labor Market Reporting Areas. Crop Area 4 is composed of two Farm Labor Market Reporting Areas (5-24-04) and (5-24-08)

7

LISTING RURAL MANPOWER SERVICES IN MICHIGAN

CROP AREA SUPERVISORS

Benton Harbor, 4140 Scottdale Rd., St. Joseph 49085
Lansing, 3215 S. Pennsylvania Ave., 48910
Manistee, 312 River Street, 49660
Marquette, Lee Hall, Northern Michigan University
Muskegon, 2492 S. Henry St., 49441
Saginaw, 2114 N. Michigan Ave., 48602
Traverse City, 126 Boardman, 49684
Ypsilanti, 120 E. Cross St., 48197

YEAR-ROUND FARM LABOR AND RURAL MANPOWER REPRESENTATIVES

Adrian, 410 E. Maumee Street, 49221
Bay City, 228 S. Washington Ave., 48706
Berrien Springs, RFD No. 2, 49103
Detroit, 5717 Michigan Avenue, 48210
Fennville, 212 E. Main Street, 49408
Hart-Shelby (Trailer) 49455
Holland, 228 N. River Avenue, 49423
Imlay City, 208 E. Third Street., 48444
Ionia, 576 State Street, 48846
Monroe, 10 Winchester Street, 48161
Pontiac, 242 Oakland Ave., 48058
South Haven, 505 Quaker Street, 49090
Sparta, 8221 Fruit Ridge Ave., 49345

SEASONAL FARM LABOR AND RURAL MANPOWER SERVICE REPRESENTATIVES

Alma, 302 W. Center Street, 48801
(April thru October)
Alpena, 1011 Washington Ave., 49707
(March thru October)
Bear Lake (Trailer) 49614
(May thru October)
Croswell, 13 Wells Street, 48422
(June thru November)
Elk Rapids (Trailer) 49629
(June thru September)
Hancock, 435 Hancock Street, 49930
(June thru September)
Jackson, 540 N. Jackson Street, 49201
(April thru August)
Keeler, Putney Building, 49057
(March thru October)
Ludington (Trailer) Rt. 1, Box 512, 49431
(May thru October)
Owendale, 7303 Main Street, 48754
(June thru August)
Reed City, Court House, 49677
(June thru August)
Spratt, Rt. 2, Lachine 49753
(June thru August)
Standish, 103 S. Main 48658
(April thru October)
Suttons Bay (Trailer) Rt. 2, 49682
(June thru September)

OTHER COMMISSION BRANCH OFFICES

Ann Arbor, 301 Maple Village, 48103
Bad Axe, 598 N. Port Crescent Street, 48413
Battle Creek, 171 W. Van Buren Street, 49016
Cadillac, 216 S. Mitchell Street, 49601
Calumet, 611 Oak Street, 49913
Cheboygan, 414 N. Water Street, 49721
Coldwater, 400 N. Chicago Street, 49036
Dearborn, 1185 Monroe Avenue, 48123
Dowagiac, 236 S. Front Street, 49047
Escanaba, 305 Ludington Street, 49829
Flint, 706 North Street, 48503
Grand Haven, 19 N. Seventh Street, 49417
Grand Rapids , 255 S. Division Street, 49502
Hillsdale, 30 S. Howell Street, 49242
Iron Mountain, 110 E. Ludington Street, 49801
Iron River, 420 Third Street, 49935
Ironwood, 135 W. Aurora Street, 49938
Ishpeming, 314 N. Third Street, 49849
Kalamazoo, 143 Stockbridge Avenue, 49001
L'Anse, 120 Broad Street, 49946
Menominee, 432 Tenth Ave., 49858
Midland, 2107 Bay City Road, 48640
Mt. Clemens, 37570 S. Gratiot, 48043
Munising, 225 E. Superior, 49862
Newberry, Community Building, 49868
Niles, 1927 Oak Street, 49120
Ontonagon, 540 River Street, 49953
Owosso, 203 S. Gould Street, 48867
Petoskey, 455 Bay Street, 49770
Plymouth, 987 S. Mill Street, 48170
Port Huron, 330 Quay Street, 48060
Royal Oak, 408 S. Lafayette, 48067
St. Ignace, Municipal Building, 49781
Sault Ste. Marie, 1908 Ashmun Street, 49784
Sturgis, 202 E. West Street, 49091
Wayne, 34530 Sims Street, 48184
West Branch, 2430 E. Houghton Ave., 48861
Wyandotte, 1234 Biddle Street, 48192

II. HIGHLIGHTS OF THE 1969 SEASON

A. WET SPRING, DRY FALL

Cool, wet weather delayed planting and other field activities this last spring to a point where by mid-May they fell as much as nine days behind a normal year's schedule. At the end of the first week of July, precipitation ranged from 3 to 7 inches above normal in most areas of the state. There were no widespread freezes in the spring and the weather for pollination was good, but rain and low temperatures hindered the development of orchard fruit and growth of spring planted crops.

Persisting rains and cold temperatures delayed the harvesting of strawberries in the southwestern part of the state, forcing a large number of migrant families to seek welfare aid to augment their meager earnings. Many workers left the area in search of work thereby creating a shortage when full scale harvesting was resumed towards the end of the picking season.

Wind and hail storms damaged the cherry crops in Grand Traverse, Antrim, and Benzie Counties in June. Another hail and windstorm damaged some of the cherry crop as well as some trees in Leelanau County on July 11, while still another such storm put an end to the tart cherry harvest in the Mason and Oceana County orchards on August 7.

The month of August was the dryest on record for many areas of the state. Also some bean and the pepper fileds in the northeast central section of the state suffered from lack of moisture. Warm, dry weather quickened the maturity of late crops.

B. TART CHERRIES AND PEACHES

Withholding actions were staged with little success by some of Western Michigan's tart cherry and peach growers in an effort to bolster low prices being offered for the delivered fruit.

The price for top grade tart cherries ranged from 8 cents to 8.5 cents per pound during the 1969 season; this was down from 15 cents per pound offered in 1968. Although the size of the state's tart cherry crop was over twice as large as 1968's, the quality was poor. Processors who still had a large inventory of the 1968 crop were offering the lower prices and accepting only top quality cherries this year.

The tart cherry harvest in southwestern Michigan came to a halt with approximately 25 percent of the crop unharvested. The loss to growers was estimated at $1.5 million. Abnormally heavy rainfall before and during harvest turned the cherries into "water-filled balloons" and "brown rot" resulting therefrom took a heavy toll. The soft fruit caused severe weight losses during the processing and clogged machinery. Many loads were turned away by processors for failure to meet minimum grades. Several area processors did not accept shaker harvested fruit, since the big soggy fruit apparently suffers more from the added stress encountered in mechanical harvesting.

Michigan's 1969 peach crop was over 2.25 times larger than 1968's small crop. A glutted local market and a national market that had been already supplied with peaches harvested earlier from other states contributed to the poor market prices. It was estimated that 20 million pounds of this season's bumper crop was left on the trees. Also, many growers placed their crop in cold storage hoping for a stronger market which did not materialize.

C. BLIGHT WHITTLES SUPPLY OF CERTIFIED BEAN SEED

The severe incidence of bacterial blight that hit Michigan's bean crops last year was felt this spring in the form of a short supply of certified seed. The disease was particularly damaging in areas hit by hailstorms or that had long periods of warm humid weather. Navy beans were hardest hit with the rejection of almost 25 percent of the total acreage. The Seaway and Gratiot varieties as well as Red Kidney bean suffered damage.

The increase in bean blight is due to several factors, some which are: (1) a reduction in the availability of blight-free seed, (2) weather conditions, (3) continuous cropping of beans, (4) poor weed control, (5) unnecessary traffic in seed fields, and (6) poor isolation of blight infected fields.

The types of blight which appeared to be responsible for the damage in Michigan are: (1) Halo, which attacks only colored varieties and thrives in cool temperatures, and (2) common and fuscous blights which attach all bean varieties.

D. RIVER FLOODS TWO YEARS IN A ROW

The Au Gres River flooded valley farms in Arenac County for the second year in a row. This year's flooding resulted in more damage to crops than the year before in that it occurred a week later in the growing season, making it more difficult for farmers to replant their fields. Many fields were under water for four days and unworkable for several weeks afterwards.

Crop losses were estimated at $650,000. A large percentage of the area's 4,500 acre bean crop was destroyed while many other crops had poor yields due to the water. Many farmers, including several with large operations, who had borrowed money the previous year were extremely hard pressed.

E. RURAL MANPOWER DEVELOPMENT TRAINING

Two training programs under the Manpower and Training Act, one for Farm Dairy Technicians and one for Farm Power Equipment Mechanics, proposed by Farm Labor and Rural Manpower Service, were approved and conducted in 1969.

The Dairy Training was conducted at Andrews University in Berrien Springs; of the fifteen applicants in the first section, five graduated March 3, 1969. Employers wage offers ranged from $60.00 per week plus house and all utilities for a handicapped graduate to a high of $100.00 per week plus room, board and laundry. Sixteen applicants enrolled in the second section with nine graduating on August 1, 1969. Offers of employment were comparable to those offered the first group of graduates.

Thirteen applicants started in the new class on December 1, 1969 and are expected to graduate on May 8, 1970.

The program has the support of the Dairy Industry in Michigan and has attracted attention in other states. Inquiries have been received from applicants in Iowa, Ohio, and Kansas who wished to enroll in our training program.

The forty-eight week Farm Power Equipment Mechanic Training Program started on January 27, 1969, with twenty-six students enrolled. At mid-term, seven new applicants started training. Nineteen students were receiving instructions at the end of the course. We had fifty-five job orders for these trainees. Wages offered range from $2.00 per hour

to $3.50 per hour plus paid health insurance, uniforms, vacations, sick leave, retirement programs and holidays.

F. TEXAS MIGRANT E & D PROJECT

Michigan in cooperation with nine other states began work on the Texas Migrant Experimental and Demonstration Project during the past year. All 750 families cooperating in the Project were Spanish-speaking farm workers who were planning to migrate from the four south Texas counties of Hilalgo, Starr, Cameron and Willacy in the lower Rio Grande "Valley". Of the 750 pre-selected families, 165 were scheduled to arive in one of the two Michigan target areas. However, we were unable to locate 55 of these family groups. The objective of the project was to determine the need for and to provide needed manpower and supportive services through a coordinated effort involving federal, state and private agencies in order to facilitate the transition of the migrant farm worker out of the migrant stream and into America's mainstream of economic and social well-being.

Increasing mechanization, improved cultural practices, and higher labor costs have caused and will continue to create a reduction in the number of available seasonal agricultural jobs.

Six bi-lingual (Spanish-English) Farm Placement Specialists were assigned to the Project. They were evenly divided into two teams each with a team captain and each team assigned to one of the two target areas. The St. Joseph target area team worked out of the Scottsdale Farm Labor Office and the Traverse City target area team operated out of a trailer office located on highway U.S. 31,3 miles south of Traverse City.

The two teams attempted to determine the immediate supportive needs of all family members and, through in-depth interviews with each family member 15 years of age and up, attempted to set up a long-range employability plan to be used in assisting the family in its transition from the migrant stream to a more permanent type job with a living wage. This employability plan covered the ultimate goals, aspirations, and methods of attainment or it may show need for more intensified services such as further interviewing, testing, counseling, educational training, vocational training, employment and financial aid along with assistance in settling out in the area where the family wishes to relocate.

TEXAS MIGRANT E & D STATISTICS

Number of Referrals	Service	Number Receiving Service
198	Medical Care	85
20	Inoculations	31
6	Pre-Natal Care	5
14	Day Care	24
0	Migrant Summer School (Minors)	26
0	Headstart	8
2	Vocational Training	2
3	Counseling	3
2	Hep (Wisconsin)	-
5	Jobs	5
34	Social Security Cards	34
100	Food Stamps	97 (At least once)
3	Financial Aid	3

NOTE: Because many of the project families had been contacted by other agency representatives concerning Day Care, Summer School, Headstart, Inoculations, and Medical Services prior to the Bi-lingual Outreach Interviewer's contact, the families had or were in the process of receiving some of these services without his assistance.

Attempts were made to refer many migrants for medical services such as physical examinations, eye examinations, and dental care at the beginning of the project before the Bi-lingual Interviewers realized that these services were almost non-existent. Overcrowded clinics serviced emergency cases, sick patients, and those not feeling well before taking care of any physical examinations. Dental and eye care were available on emergency basis only.

During the off-season months, these same services are being provided for former migrant families who have already settled in the Benton Harbor and Saginaw areas to obtain the desired and necessary supportive and manpower services.

III. WAGES AND EARNINGS

To comply with the regulations of the United States Secretary of Labor governing assistance in interstate recruitment, wage surveys were conducted when administratively possible. Prevailing wage findings were made for crop activities in which a significant percentage of farm workers were outside of the state through the interstate clearance system of the Employment Service. Wage surveys were also conducted in crop activities when preliminary research indicated that the wage structure had changed significantly since the previous survey was made, and in activities with a history of wage fluctuations. A few proposed findings were cancelled when a valid sample could not be obtained.

Farm Labor and Rural Manpower Personnel conducted thirty crop area wage surveys through the state and one state-wide survey. The surveys were conducted in fifteen pre-harvest and harvest activities, resulting in thirty-two prevailing wage findings in the nine crop wage area and one state-wide finding in pickle harvest. Twenty-one of the wage findings were in Fruit Crops, while eleven were in Vegetable crops and one in a miscellaneouse activity. In addition, several surveys were conducted for year-round workers in agricultural and related activities.

In meeting sampling requirements, the data gathered covered 26,216 seasonal workers, 27.6 percent of the total number of seasonal workers employed in the activities in which prevailing wage findings were made. Workers from instate sources comprised 22 percent (5,720 workers) of the total sample, while interstate sources accounted for 78 percent (20,496 workers). Vegetable cultivation and harvest activities utilized 33.5 percent (8,779 workers) of the total sample, while fruit cultivation and harvest activities accounted for 65.1 percent (17,066 workers) and 1.4 percent (371 workers were employed in miscellaneous activities.

The above sample was drawn from a population of 95,142 seasonal workers who were employed in these activities, of which 24 percent were from instate sources while 76 percent were from interstate sources. Fruit cultivation and harvest employed 77.5 percent of these workers,. while vegetable cultivation employed 21.8 percent and 0.7 percent were employed in other miscellaneous activities.

The sampling covered 1,112 employers of which 354 grew vegetable crops, 741 grew fruit crops, and 17 percent were engaged in other activities. These employers comprised 18.7 percent of the total number of employers employing workers during the survey period in these selected activities.

TABLE A. A comparison of the total number of workers, in the universe, which were employed in the activities surveyed in 1968 and 1969:

Workers	1968	Percent	1969	Percent
Instate	41,777	29.0	22,751	24.0
Interstate	103,279	71.0	72,391	76.0
Total	145,056	100.0	95,142	100.00

TABLE B. A comparison of the total number of workers in the sample, which are employed in the activities surveyed in 1968 and 1969:

Workers	1968	Percent	1969	Percent
Instate	11,379	28.0	5,720	22.0
Interstate	29,386	72.0	20,496	78.0
Total	40,765	100.0	26,216	100.0

TABLE C. A comparison of the 1963-1969 weighted average hourly earnings of piece and hourly rated workers is presented below.

Method of Payment	1963	1964	1965	1966	1967	1968	1969
Piece Rates	$1.153	$1.042	$1.082	$1.333	$1.441	$1.656	$1.680
Hourly Rates	.967	1.013	1.183	1.297	1.301	1.422	1.35 1
Combined Piece & Hourly Rates	1.115	1.041	1,100	1.322	1.409	1.597	1.615

Comparison of the 1968 and 1969 wage surveys and findings disclosed the following data:

1. Due to the selectivity of the data used in the wage surveys, caution must be exercised in the interpretation of the statistics derived from the wage surveys, especially when these statistics are compared with those of previous years. Many factors are involved such as type of activities surveyed, crop wage areas surveyed, characteristics of the unit of payment used in the activities surveyed, and adverse weather effects on the rates of these units.

2. Eighteen of the wage finding classes surveyed in 1968 were resurveyed in 1969. These comprised fourteen activities and resulted in thirty-two prevailing wage findings. 41 percent (9) of these prevailing wage findings showed an increase in rates as compared with 46 percent (10) for the 1967-1968 seasons, 40 percent (17) remained the same as compared with 50 percent in 1967-1968, and 19 percent (6) showed a decrease as compared with only 4.5 percent in the 1967-1968 seasons. A conglomeration of factors contributed to the above situation, some which are: crop damage during the 1968 season inflated the wage rates of several major crops throughout the State, while a slight labor surplus in 1969 plus a lower price offered to the grower tended to lower rates in some crop activities.

   It also must ve noted that over 90 percent of these findings are piece-work rates which are more susceptible to the above stated conditions. Five of the six findings which showed a decrease in the rates were in crops that had higher rates in 1968 because of poor picking conditions experienced during the previous season, which forced many growers to offer higher piecework rates to better the earnings potential. This can be readily seen in Table C which shows that the average hourly earnings of piece-rate workers in 1969 to be slightly higher than that of 1968 despite the lower piecework rates being paid in some of the major activities.

3. The combined average hourly earnings of piecework rates and hourly rated workers, and the weighted average hourly earnings ot piecework rated workers showed a slight increase in 1969 over 1968, while that of hourly rated workers showed a 5 percent decrease. This decrease can largely be attributed to the higher percentage of surveys in 1968 covering mechanized activities as compared to 1969. Generally, workers employed in activities that are mechanized receive a comparatively higher rate than hand harvesters. An analysis of the surveys conducted both in 1968 and 1969 showed that the weighted average hourly earnings of hourly rated workers increased approximately 3.8 percent in 1969.

4. There seems to be a leveling off in the rate of increase of wages and earnings of seasonal farm workers. Two major factors influencing the rates are the market price of the products and the ability of the growers to absorb the increase in labor costs yet acquire a fair return for their investments. These two factors have neared the saturation level during the current year forcing the growers to resort to various methods to improve the situation.

   A fuller discussion will be found under Employment and Operations Section of the report. It is anticipated that there will be a continued increase in the wages and earnings, albeit at a slower rate, which will be mostly due to the increase in the number of higher skilled job openings;, and a corresponding decline in lower paid menial jobs.

5. The increase in the ratio of instate and interstate workers sampled is mainly due to the greater percentage of fruit crop surveys and the state-wide pickle survey.

MICHIGAN STATE MINIMUM PIECEWORK RATES

Minimum piece rates were established by the Wage Deviation Board of the Michigan Department of Labor for vegetable and fruit harvest in compliance with Section 14 of Act 154 of the Public Acts of 1964. A list of these rates follows. Any known instance where an employer is offering less or different basic rate than the rate established by the Wage Deviation Board is being reported by Farm Labor Specialist to the Wage and Hour Division, Bureau of Safety and Regulation, Michigan Department of Labor, for investigation and determination. However, the established rate may be reduced in some cases up to a maximum of 16% for housing being provided to the workers, if such facilities are licensed under Act 289 of the Public Acts of 1965.

Vegetable Crop Harvest	Rate
Asparagus	$ .039 per pound
Bean, snap	1.11 per bushel
Cucumbers (Pickles)	.019 per pound (all grades included)
Greens	.231 per 25-pound crate
Lettuce, head	.068 per 24-head crate
Onions, dry (yellow)	.097 per 5-peck crate
Onions, dry (white)	.16 per 5-peck crate
Onions, green	.025 per bunch (8-9 onions per bunch)
Peppers, "cherry"	.806 per bushel
Peppers, "long green"	.216 per bushel
Potatoes	.073 per bushel
Radishes	.208 per doz. bunches (18-20 radishes per bunch)
Tomatoes, fresh	.184 per 5/8 bushel hamper
Tomatoes, process	.133 per 5/8 bushel hamper

Fruit Crop Harvest	Rate
Apples	.145 per bushel (stripping rate)
Apples, crab	.50 per bushel (stripping rate)
Blackberries	.14 per quart
Blueberries, hand picked	.09 per pound
Blueberries, hand vibrator assisted	.02 per pound
Cherries, tart	.70 per 27-pound lug
Cherries, sweet	.77 per 24-pound lug
Grapes, Concord & Niagara	.0077 per pound
Grapes, Delaware	.0098 per pound
Peaches, process	.163 per bushel
Pears	.224 per bushel
Plums (such as Blue Damson & Shropshire)	1.00 per bushel
Prunes (Italian, Stanley and similar variety of plums)	.394 per bushel
Raspberries, black	.14 per quart
Raspberries, red	.20 per quart
Strawberries, fresh	.09 per quart
Strawberries, process	.065 per pound
Strawberry plants-sort, bunch & tie conveyor belt & machine-assisted operation	3.00 per thousand plants
Strawberry plants-sort bunch & tie non-mechanically assisted operation	4.00 per thousand plants

TABLE OF PREVAILING WAGE RATES PUBLISHED IN 1969

Area, Activity and Wage Finding Class	1969 Prevailing Wage Rates	Weighted Average Hourly Earnings in 1969
STATEWIDE		
Statewide Pickle (Hand Pick)	$1.30 per hour	-
BENTON HARBOR AREA (5-24-01)		
Asparagus Harvest (Walk and Snap)	4¢ per pound	*
Cherry Harvest (Hand Pick Tart Cherries)	80¢ per 27-lb lug	$1.30
Grape Harvest (Pick Concords and Niagaras)	35¢ per 36-lb box	$1.55
Plum Harvest (Hand Pick Stanley etc., Prunes)	50¢ per bushel	$1.48
Strawberry Harvesst (Pick for Fresh Market)	72¢ per 8-qt. carrier	$1.53
Tomato Harvest (Hand Pick for Processing)	15¢ per 5/8 bu. (54-lb per bu.)	$2.12
MUSKEGON AREA (5-24-02)		
Apple Harvest (Hand Pick, Regular)	30¢ per bushel	$2.54
Asparagus Harvest (Walk and Snap)	4¢ per pound	$1.71
Cabbage and Cauliflower Cut, Tie and Pack)	$1.50 per hour	
Nursery and Landscape (Plant, Propagate and Cultivate)	$1.60 per hour	-
Pear Harvest (Hand Pick)	30¢ per bushel	$1.95
MANISTEE AREA (5-24-03)		
Apple Harvest (Hand Pick, Regular)	25¢ per bushel	$2.02
Strawberry Harvest (Hand Pick for Processing)	6.5 ¢ per pound	$1.43
(Hand Pick for Fresh Market)	72¢ per 8-qt. carrier	$2.37
TRAVERSE CITY (5-24-04)		
Apple Harvest (Hand Pick, Regular)	30¢ per bushel	$1.95
Strawberry Harvest (Pick for Processing)	80¢ per 12-lb pail	$1.78
SAGINAW AREA (5-24-05)		
Apple Harvest (Hand Pick, Regular)	30¢ + 5¢ bonus per bushel or $1.75 per hour	$1.37
Pepper Harvest (Hand Pick, Long Green)	30¢ per bushel	$1.80

Area, Activity and Wage Finding Class	1969 Prevailing Wage Rates	Weighted Average Hourly Earnings in 1969
LANSING AREA (5-24-06)		
Apple Harvest (Hand Pick, Regular)	25 ¢ + 5¢ bonus per bushel	$2.59
Pickle Cultivation (Hoe & Train Vines)	$1.32 per hour	-
		-
YPSILANTI AREA (5-24-07)		
Apple Harvest (Hand Pick, Regular)	35 ¢ per bushel	$2.87
Truck Crop Harvest	$1.45 per hour	-
Tomato Harvest (Hand Pick for Process w/stems)	16 ¢ per 5/8 bushel hamper	$2.04
ALPENA AREA (5-24-08)		
Strawberry Harvest (Pick for Fresh Market)	9 ¢ per quart	$1.49
UPPER PENINSULA (5-24-09)		
Potato Harvest (Hand Pick up)	12 ¢ /70-lb. pickers bag	$1.76

* *These averages were either not available or the result is in doubt due to a small sample size.*

IV. MAJOR CROPS

This section gives a breakdown of seasonal employment by date and sources of workers (local, intrastate, and interstate) for 1969 in those crop activities in which a relatively large number of seasonal workers were employed. The crops related to these activities are not necessarily Michigan's most productive crops or larges revenue producing crops.

Under each listed activity is given an estimate of the wages earned by seasonal workers. These are only estimates and are shown so that some idea may be gained of the relative importance of different crop activities with one another in terms of wages.

In 1969 employment of seasonal agricultural workers continued to decline at a rate greater than in each of the last several years. The more significant decline may be attributed to the generally smaller acreages and yields per acre in vegetable crops. However, the over all decline was slowed by a generally good year in Michigan fruits and berries.The decline in employment of seasonal workers can also be attributed to the continued increased use of mechanical and technological innovations which replace or reduce the need for such labor.

Crop activities in Michigan are listed below in chronological order according to period of seasonal employment for the year 1969.

Major Crop and/or Activity	Period of Employment - 1969
Nursery and Sod Activities	March 1 - December 1
Vegetable and Truck Crop Cultivation & Harvest	April 16 - November 15
Christmas Tree Activities	May 1 - December 15
Asparagus Harvest	May 1 - June 15
Strawberry Harvest	May 16 - July 31
Sugar Beet Cultivation	May 16 - August 31
Pickle Hoeing and Harvest	June 1 - September 15
Cherry Harvest	June 16 - August 15
Raspberry Harvest	July 1 - August 31
Blueberry Harvest	July 1 - October 15
Tomato Harvest	July 1 - October 15
Potato Harvest	July 1 - November 15
Peach Harvest	July 16 - October 15
Apple Harvest	August 1 - November 30
Pear Harvest	August 1 - October 15
Plum Harvest	August 1 - October 15
Grape Harvest	September 16 - October 31

Semi-monthly estimates of seasonal employment in table form are included under each crop activity listed below. The information for major crops on production, acreages, average yield per acre, and value of crops was obtained from reports issued by the United States Department of Agriculture and the Michigan Department of Agriculture. Data on employment and crop conditions was gathered from surveys by field personnel and from basic area data reports.

A. **APPLES**: Michigan orchards produced 680 million pounds (or 14 million bushels) of apples in 1969 which was a 22.5% increase from 1968's total. Nationwide, apple production increased 24% over the 1968 harvest. Michigan ranked third in production amongst all states in 1969 (up from fourth position in 1968) and grew 10% of all the nation's apples. Generally good pollination, growing, and harvesting conditions helped to develop the state's best year of apple production since 1966. Apples harvested were of good size and quality. Adequate soil moisture helped the crop withstand a dry period from late July thru August. Michigan's four major varieties: Jonathan, McIntosh, Northern Spy, and Red Delicious represented nearly 75% of the total crop. Red Delicious was the largest gainer in production from the previous year with an increase of approximately 140 percent.

Month & Date	Total Workers Employed	Local	Interstate	Intrastate
August 15	455	285	50	120
August 31	1,375	535	115	725
September 15	3,475	1,100	170	2,195
September 30	9,975	2,695	225	7,055
October 15	10,826	2,894	315	7,617
October 31	6,796	2,292	160	4,344
November 15	1,150	596	-	544

Some 10,826 workers were employed at the peak of Michigan's apple harvest (October 1 - 15). The period of maximum employment occurred two weeks later than in 1968 and an additional 496 persons were employed during this period. Roughly $2,860,000 were paid in wages to workers for apple harvest activities in 1969.

B. **ASPARAGUS:** Increased harvesting acreage and average yield per acre in 1969 resulted in an asparagus harvest of record size in Michigan. A total of 10,400 tons were produced for both fresh markets and processing uses; a 17% increase from 1968 and an 11% increase over the five year average from 1965 thru 1969. Approximately 9,700 tons were used for processing and the remaining 700 tons went to fresh markets. The value of the crop to Michigan growers was estimated at $4,368,000; a 19% increase in value over 1968's crop. Michigan was the nation's fourth leading producer of asparagus and grew about 7% of the Nation's total crop. Growers in Michigan have indicated that they plan on planting 14,600 acreas of asparagus in 1970 as compared to 13,900 acres in 1969.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
May 15	2,380	1,055	130	1,195
May 31	2,315	1,008	120	1,187
June 15	2,055	868	60	1,127

Peak employment in harvesting asparagus totaled 2,380 persons in 1969 which was 488 workers less than in 1968. About $495,000 were paid in wages to seasonal workers engaged in asparagus harvest activities.

C. **BLUEBERRIES:** A 26% increase in production from 1968's short crop highlighted the 1969 blueberry harvest for Michigan growers. 11,163,000 pounds were delivered to fresh markets while 19,875,461 pounds went to processing plants. Processors froze 16,212,083 pounds and canned 3,663,378 pounds. Nearly all of 1969's increased production was frozen. The year's production was slightly more than 3.5 million pounds above the five year average from 1965 through 1969. The absence of severe spring frosts also helped to boost the size of year's harvest.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
July 15	128	78	-	50
July 30	1,870	1,095	87	688
August 15	4,920	2,962	123	1,835
August 31	4,200	2,443	185	1,572
September 15	1,050	512	85	453
September 30	203	110	-	95
October 15	50	25	-	25

An estimated 4,950 persons were employed at the height of Michigan's blueberry harvest which occurred between August 1st and 15th. It was appraised that 25% of Michigan's blueberry crop was harvested by hand picking. Nearly $750,000 were earned in wages by blueberry harvest hands.

D. **CHERRIES:** Adverse weather condition and crop abandonment due to low market prices reduced actual tart cherry harvest below early season estimates. The final production of tart cherries totaled 105,000 tons -- 5% more than in 1968. Economic abandonment was estimated at 5,000 tons. Michigan orchards produced 23,000 tons of sweet cherries in 1969 or abour 4% more than the previous year's total. Production of both sweet and tart cherries in 1969 were nearly 28% above the five year average from 1965 through 1969. As usual, Michigan ranked first in tart cherry production among all states, producing roughly two-thirds of the nation's total crop, but slipped from its 1968 position of second to the position of third in 1969 among all states in the production of sweet cherries.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
June 30	75	28	-	47
July 15	7,975	2,055	510	5,410
July 31	23,880	3,435	2,150	18,295
August 15	16,515	1,680	705	14,130

During the peak of Michigan's cherry harvest, July 16 - 31, an estimated 23,875 persons were employed. This was 1,566 less than were employed during the maximum period of employment in the year previous. Approximately 45% of the crop was hand picked in 1969. This represented an increase of about 10% above that harvested by hand during the previous year. Some $4,200,000 were earned in wages by cherry harvest workers in 1969 in Michigan.

E. **CHRISTMAS TREES:** During 1969 some 2,000,000 Christmas trees were harvested in Michigan. The trees were shipped to points in Michigan, neighboring states, and to numerous states in the South and Southwest. Mexico City was the distribution point for Michigan trees shipped outside of the U.S. Most of Michigan's Christmas tree farms and plantations lie in the northwestern area of the Lower Peninsula. Starting with the planting of new acreages of trees in the spring (which are allowed to grow 3 - 5 years), continuous care is provided for the crop until harvest operations are normally concluded between December 10th and 20th. Pruning, irrigation, fertilization, sparying for both insect control and for tree coloring are activities which are undertaken between the planting and harvest periods.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
May 15	160	150	-	10
May 31	185	175	-	10
June 15	555	375	10	170
June 30	1,905	1,350	35	520
July 15	1,910	1,360	75	475
July 31	963	743	75	145
August 15	70	70	-	-
August 31	80	50	-	30
September 15	-	-	-	-
September 30	105	35	-	70
October 15	440	335	-	105
October 31	1,085	825	20	240
November 15	925	665	20	240

Peak employment in Christmas tree cultivation (July 1 - 15) was 225 less than reported in the previous year. However, harvesting activities (October 15 to December 15) provided employment for about 300 more persons. Most labor for tree harvesting came from local sources although there was a significant increase in interstate workers from Texas in the labor force for this activity. An estimates $800,000 was paid in wages to persons employed in Christmas tree activities throughout the year.

F. **GRAPES:** Michigan vineyards produced 40,000 tons of grapes. Although this was a 42% increase over 1968's short crop, it was still less than the five year average from 1965 through 1969 of 45,000 tons per year. Favorable weather during the late summer and early fall helped the crop to gain a good sugar level content. The state produced 1% of the nation's total grape crop and in 1969 Michigan ranked fourth among all states in production -- up one position from 1968.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
September 30	1,215	455	50	720
October 15	1,230	530	60	640
October 31	10	10	-	-

An estimated 1,230 workers were employed in the grape harvest at peak in 1969, as compared with 1,430 workers during the same period last year as mechanical harvesting made greater inroads into this activity. Michigan grape growers paid approximately $205,000 to workers to harvest the grape crop this year.

G. **NURSERY AND SOD:** The State's nursery industry devoted 15,827 acres to the propagation of various nursery stocks during the 1968-69 season. This was an 8% decline in acreage from the 1967-68 season. Decreased acreages were noted in every classification of nursery stocks except for an increase in the number of acres used for ornamental, evergreens, and fruit tree stocks which increased from 6,412 acres in 1968 to 6,907 acres in 1969.

The estimated 150 sod growers in Michigan harvested 24,000 acres of sod during 1969 which was 1,000 acres more than was harvested in the previous year. The sod market remained stable during the year. The demand for sod is dependent on the level of activity in the construction industry. If construction activity decreases during the coming year, it can be expected that the demand for sod will be lessened. Virtually all the sod harvested in the State is done so with the use of mechanical sod cutters and rollers.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
April 15	1,275	1,020	50	105
April 30	1,552	1,182	100	270
May 15	1,845	1,420	100	325
May 31	1,878	1,418	115	345
June 15	2,040	1,615	115	310
June 30	1,725	890	15	320
July 15	1,591	1,219	10	332
July 31	1,530	1,185	40	305
August 15	1,605	1,300	30	275
August 31	1,550	1,265	30	255
September 15	1,359	1,054	25	280
September 30	1,245	1,025	-	220
October 15	1,240	955	100	185
October 31	1,160	920	50	190
November 15	398	308	50	40

A gain of the number of seasonal workers employed in the nursery and sod industry amounted to not quite 2.8% from 1968 to 1969. The peak employment period from June 1 - 15 of 2,040 persons was 333 more workers than were employed during the same period of peak employment in 1968. Nearly $1,980,000 were paid in wages to employees for their work in nursery and sod activities.

H. **PEACHES**: Production of Michigan peaches in 1969 increased 2.25 times over 1968's short crop, yet there were still another 20 million pounds that were left unharvested because of economic abandonment. A total of 95 million pounds were harvested in the state which placed it sixth among all states and represented 2.5% of the nation's production. The harvest for 1969 was 31% greater than the five year average from 1965 through 1969 which was 65.5 million pounds.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
July 31	50	15	-	35
August 15	535	174	20	341
August 31	1,740	435	95	1,210
September 15	1,520	690	35	795
September 30	635	285	10	340
October 15	200	100		100

Peak harvest activities provided employment for 1,740 workers at its peak this year, an increase of 631 workers over 1968's peak period. The number of man days of employment of seasonal labor has steadily decreased over the past ten years despite the larger number that were employed at peak in 1969. Roughly $400,000 were paid to seasonal workers to harvest peaches this season.

I. **PEARS**: Michigan's 1969 pear crop, 24,000 tons, was more than double the size of 1968's short crop which was the smallest on record. This year's crop was 14% larger than 1968's but still 13% smaller than the five year average from 1965 through 1969. Some 6,000 tons of pears were not harvested by growers in the State due to economic abandonment. Michigan ranked fourth amongst all States in pear production in 1969 and harvested 3.4% of the nation's output.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
August 15	75	25	-	50
August 31	115	25	-	90
September 15	1,240	350	55	835
September 30	600	275	-	325
October 15	139	100	-	39

Peak employment jumped from 518 workers in 1968 to 1,240 in 1969. Still, this represents a decrease in labor intensity from previous years. Wages paid to seasonal labor this year to pick pears amounted to approximately $90,000.

J. **PICKLING CUCUMBERS (PICKLES)**: Michigan continued to rank first in the nation in the production of pickling cucumbers although total state production in 1969 decreased 5% from 1968 and 15% below the five year average from 1965 through 1969. A total of 88,130 tons were harvested in 1969 – 17% of the production nationally. An average of 4.08 tons of pickles were picked per acre from the 21,600 acreas harvested in the State. The value of Michigan's pickle crop to the producers was estimated at $8,901,000.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
CULTIVATION				
June 15	5	5	-	-
June 30	695	184	-	511
July 15	2,010	250	-	1,760
July 31	947	137	-	810
HARVEST				
July 31	7,945	980	200	6,765
August 15	12,572	1,510	250	10,812
August 31	10,497	1,420	325	8,752
September 15	1,552	275	25	1,252

Nearly 650 fewer workers were used during the peak period of 1969's pickle cultivation than in 1968's. The planting of high density populations in fields that were machine harvested eliminated the need for much of the cultivation in those fields. Nearly 26% fewer seasonal laborers were employed in harvesting this year's pickle crop than were used in 1968' s. Increased machine harvesting was the primary factor responsible for the reduction in the size of the work force and length of employment. An estimated $200,000 was paid to seasonal workers to cultivate pickle fields and about $2,625,000 were paid out to workers for harvest work.

K. **PLUMS:** Plum production for Michigan in 1969 totaled 14,500 tons – 1,500 tons more than harvested in 1968 and 1,100 tons more than the five year average from 1965 through 1969. An additional 1,500 tons of plums were abandoned by State growers due to economic conditions this year. Despite Michigan's increased production, it dropped from its former position as the third leading State in plum production to a position of fifth in 1969. Growers in the State harvested 18% of the nation's total in 1969.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
August 15	75	25	-	50
August 31	115	25	-	90
September 15	1,290	390	55	845
September 30	600	275	-	325
October 15	139	100	-	39

Some 150 more workers were employed at the peak of this year's plum and prune harvest than were hired at the peak of 1968's harvest. These harvest workers earned $60,000 for their work in Michigan plum orchards in 1969.

L. **POTATOES:** Michigan's total Irish Potato production of 903,200,000 pounds was a 16% increase over 1968's total poundage yet it was also 1% less than the five year average from 1965 through 1969. Steadily increasing yields per acre have nearly offset declining acreage and have kept total production relatively constant over the five year period. Production for late summer potatoes was reported to be 205,200,000 pounds

and 698,000,000 pounds of fall potatoes were harvested. The average yield per acre for both summer and late fall potatoes were 22,300 pounds. Harvested acreage totaled 10,800 acres of late summer potatoes and 29,700 acres of fall potatoes. Generally, good weather through the growing and harvest seasons and irrigation helped increase the average yield per acre in 1969.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
July 15	30	30	-	-
July 31	510	425	-	85
August 15	1,035	735	100	200
August 31	1,030	685	100	245
September 15	1,200	905	75	220
September 30	2,125	1,670	50	405
October 15	1,810	1,535	50	225
October 31	730	600	25	105
November 15	210	200	-	10

The peak employment of 2,125 workers, for 1969's potato harvest was approximately 13% less than the number of persons employed during 1968's peak period. Much of the hand labor needed to help harvest Michigan's potato crop is used in the Upper Peninsula where soil conditions hamper the effective use of mechanical harvesters. Approximately $375,000 were paid to labor involved in the State's potato harvest.

M. **RASPBERRY:** Raspberry production improved markedly in 1969 in comparison with 1968's short crop. It was the largest harvest of raspberries since 1966. Total production amounted to 3,569,337 pounds which was slightly below the five year average from 1965 through 1969 of 3,751,789 pounds. Of the amount harvest this year, 1,921,078 pounds were canned, 1,511,774 pounds were frozen, while 105,246 pounds of red raspberries and 31,239 of black raspberries were reported sold to fresh markets.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
July 15	3,050	790	300	1,960
July 31	145	125	-	20
August 15	225	225	-	30
August 31	30	30	-	-

Wages paid to workers in this crop activity totaled nearly $180,000.

N. **STRAWBERRIES:** Although the acreage planted in strawberries continued to decrease, increased yields per acre this year helped to produce the state's best crop since 1965. The average yield per acre was 5,300 pounds this year. Growers harvested 6,300 acres of strawberries which was 200 acres fewer than in 1968 and substantially less than the five year average from 1965 through 1969 of 7,620 acres. The total crop amounted to 33,390,000 pounds and had a value of $7,100,000 to growers. Michigan ranked a distant third among states in the nation in strawberry production this year – up one position from its ranking in 1968.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
May 31	100	25	-	75
June 15	18,235	4,310	460	14,465
June 30	22,105	3,245	655	18,305
July 15	8,045	1,620	265	6,160
July 31	1,710	1,710	-	-

The number of seasonal persons working during the peak employment period of the strawberry harvest was 7% less in 1969 than during the similar peak period in 1968. Employment for the entire strawberry harvest season indicated an increase in employment of 6% as compared to 1968. An estimated $1,325,000 were paid in wages to seasonal workers for strawberry harvest activities.

O. **SUGAR BEETS:** Sugar beet production in Michigan totaled 1,500,000 tons in 1969; a decrease of 208,000 tons from 1968 but 11% more than the five year average from 1965 through 1969. Harvested acreage was slightly more than in 1968 and 13% above the five year average. Average yield per acre decreased from 19.0 tons in 1968 to 16.2 tons in 1969. Michigan ranked 7th nationally in the production of sugar beets during 1969; a decline from its position of 5th in 1968. The state produced about 5% of the nation's total production for 1969.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
May 31	1,325	105	-	1,220
June 15	3,720	330	-	3,390
June 30	3,916	316	-	3,555
July 15	2,360	235	-	300
July 31	500	20	-	480
August 15	305	100	-	205
August 31	100	40	-	60

Virtually all seasonal workers employed in sugar beets are employed in cultivation as much of the harvesting is mechanized. There has been a substantial decrease in the need for sugar beet cultivation as herbicides, mechanical blocking machines, and precision space planting eliminate the need for hand operations. The peak employment period for 1969 found 22% fewer seasonal workers cultivating sugar beets than in 1968. There was a decrease of 26% from the previous year in the number of persons employed during the season for this activity. Seasonal workers employed in sugar beet cultivation earned some $850,000 in wages during 1969.

P. **TOMATOES:** Despite a significant decrease in the production of Michigan tomatoes in 1969 from 1968's total of 4,162,963 bushels, a stronger market for fresh tomatoes made this year's crop worth $7,243,000 to growers or $300,000 more than the year before. In 1969, 874,074 bushels were placed on the fresh market while 2,159,259 bushels were sold to processors. There were 9,200 acreas of tomatoes harvested in the state during 1969; a 17% decline from 1968 and 2,600 fewer acres than the five year average from 1965 through 1969. Average production per acre for both processing and fresh market tomatoes was 322.7 bushels which fell below the five year average of 325.7 bushels per acre. Michigan ranked 5th in the production of fresh market tomatoes and

7th in the production of processing tomatoes nationally during 1969. The state produced about 1.5% of the nation's total crop.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
July 15	20	5	-	15
July 31	-	-	-	-
August 15	1,535	415	-	1,120
August 31	3,240	725	95	2,420
September 15	3,995	995	10	2,990
September 30	1,375	560	-	815
October 15	560	250	-	310

The peak period of employment in Michigan's tomato fields found an estimated 3,995 workers employed in harvest activities. This was a 26% decline from the number of persons employed during 1968's peak period of employment. Decreased acreage was the primary factor in the reduced need for seasonal labor. Michigan growers paid roughly $575,000 to seasonal workers harvesting tomatoes.

Q. **VEGETABLE CROPS:** These include cabbages, cantaloupes, carrots, cucumbers for slicing, green peppers, lettuce, onions, snap beans, summer celery and sweet corn. An increase in the number of acres harvested was not enough to offset decreased yields per acre. Total production amounted to 632,000,000 pounds in 1969 as compared to 709,000,000 pounds in 1968. Harvested acreage increased in 1969 to 49,000 acres from 48,450 acres in 1968. The average yield per acre decreased during 1969 to 12,720 pounds from 14,630 pounds in 1968. Cabbage was the only crop which showed a gain in production. It's production rose from 70,200,000 pounds in 1968 to 82,000,000 pounds in 1969. The production of onions showed the greatest decline from 224,000,000 pounds in 1968 to 178,800,000 pounds during 1969. Average yield per acre dropped in each crop except canteloupes and carrots whose averages remain the same.

Month & Date	Total Workers Employed	Local	Intrastate	Interstate
June 15	60	60	-	-
June 30	165	124	-	40
July 15	1,005	635	-	370
July 31	3,765	1,995	155	1,655
August 15	5,715	2,930	95	2,690
August 31	6,325	3,370	230	2,725
September 15	5,600	2,925	145	2,730
September 30	4,705	2,420	210	2,075
October 15	2,810	1,660	80	1,070
October 31	1,640	985	40	615
November 15	300	165	-	135

The peak period of employment for seasonal workers in vegetable crop planting, cultivating and harvest activities reached a maximum of 6,325 persons -- 15% less than 1968's peak employment total. Even greater declines, percentage wise. were noted during the other seasonal employment periods in 1969. Over $1,800,000 were paid in wages to seasonal labor engaged in vegetable crop activities.

V. RECRUITMENT

In 1969 the new housing regulations established in 1968 continued to decrease the number of clearance orders being placed with the Farm Labor and Rural Manpower Service for assistance in interstate recruitment. Several orders had to be cancelled because of the failure of employers to complete necessary corrections by a specified date. Other reasons for the decrease in the number of orders are increased use of sprays for the control of weeds and increased mechanization in the harvesting and handling of crops which decreased the number of workers needed. Also, larger employers elected to use private licensed recruiters.

However, the lack of early clearance orders allowing for a pre-season scheduling of employment did not have a serious affect on the labor supply, since many of the workers returned to the same employers where they have worked in past years. A large influx of free-wheelers and a delay in the harvest of early crops due to adverse weather conditions created temporary surpluses of labor in many parts of the State.

The influx of unscheduled workers created additional need for shelter and protection from the elements in some areas and forced many workers to live in housing and facilities that were below the federal minimum standards. Such temporary surpluses of labor also created a greater need for supportive service, and Farm Labor and Rural Manpower Personnel referred many workers to agencies and organizations that provided emergency food and medical aid.

Due to the low volume of orders, the Automatic Data Processing System was discontinued in 1969. This reduction of interstate clearance orders made the project administratively and financially impractical.

During the past year it has been necessary for Farm Labor and Rural Manpower Service Personnel to make 11,919 employer visits to the 3,407 employers that were serviced; These employers placed 7,611 orders for 94,232 job openings which resulted in 67,747 job placements. 120 orders were cancelled due to housing deficiencies. In attempts to fill job openings from local sources, Rural Manpower Service Personnel made personal contacts as follows: 284 with newspapers, 165 with radio stations, 5 with television stations and 150 with high schools. Also 127 schools were contacted by letter. These contacts made it possible to place 7,020 local youths one or more times during the 1969 season.

TABLE D
INTERSTATE ORDERS AND OPENINGS THAT WERE EXTENDED
IN 1969, AND THOSE CANCELLED BECAUSE CORRECTIVE ACTION
WAS NOT COMPLETED BY DATE SPECIFIED

	STATE	ORDERS		OPENINGS	
		Extended	Cancelled	Extended	Cancelled
	REPORTING STATE AS ORDER-HOLDING STATE				
1.	Reporting State, TOTAL	679	120	27,163	4,222
2.	Applicant-Holding States Involved:				
	Alabama	3	0	6	0
	Arkansas	1	0	15	0
	Florida	93	12	2,079	278
	Georgia	6	0	304	0
	Illinois	1	0	4	0
	Indiana	1	0	44	0
	Kentucky	6	0	132	0
	Louisiana	54	31	1,287	835
	Mississippi	4	0	101	0
	Missouri	9	2	175	23
	Montana	6	0	48	0
	Nebraska	4	0	40	0
	New Mexico	1	0	10	0
	Ohio	26	0	350	0
	Puerto Rico	7	0	154	0
	South Carolina	1	0	30	0
	Tennessee	3	0	65	0
	Texas	450	75	22,349	3,086
	Wyoming	2	0	10	0

* *Failure of employers in meeting minimum Federal Housing Standards by a specified date resulted in cancellation of these orders also, many growers did not request interstate workers or were refused service due to the above stated reason.*

VI. AGRICULTURAL LABOR HOUSING

The revision of the federal standards during the latter part of 1968 greatly increased the minimum requirements. This, in turn, significantly increased the total labor costs and accelerated development of mechanization in certain harvest activities. The revised State Regulations did not become effective until sometime in May 1969. This occurred after many licenses were issued on the basis of the old standards. To maintain equity, the more stringent standards were not put into full effect for the balance of the year. However, growers were made aware of deficiencies under the revised standards and were told that these standards are to be enforced in 1970. The new state standards are equal to the revised federal standards in all respects except the requirements for showers. Under the State Requirements showers with hot and cold running water are not mandatory until after January 1, 1971 except in newly constructed facilities, while the federal regulations require showers immediately in any camp housing individuals from

more than one family.

Early in the year, an agreement was reached between the Regional Office of the Manpower Administration, the Michigan Department of Public Health and this agency whereby inspection and evaluation of housing for agricultural workers was to be performed by the Health Department with a copy of the inspection report going to the local Farm Labor office servicing the area in which the employer is located. However, Farm Placement Specialists were to accompany the Health Department representatives on as many tours as possible to become more knowledgeable about the housing in his area. The Regional Office Representative was to make a few random inspections during the season of housing in which interstate clearance was involved because minimum federal standards must be assured when assistance in interstate recruitment is provided by the Employment Service.

The Michigan Department of Public Health issued licenses for 2,178 camps having an adult capacity of 63,984 persons. Initial inspections revealed 7,265 deficiencies. Reinspections revealed that 2,560 of these deficiencies were corrected. However, not all camps showing deficiencies on the initial inspection were reinspected because of the lack of sufficient personnel. Licenses were not recommended on 66 applications, and 9 cases of failure to comply with Act 289 of the Public Acts of 1965 were reported and citation action requested from Prosecutors in 7 counties.

Failure to reach a common denominator at the grass roots level in the interpretation of such terms as "adequate," "free from depressions in which water may stagnate," "create a nuisance," "uncontrolled weeds or brush," "provide reasonable privacy," etc. had caused many misunderstandings between persons making inspections separately. To remedy this situation, representatives of the three agencies involved met in November and December 1969 to work out different arrangements for the 1970 calendar. First it was agreed that joint inspection tours would be made. At the end of each inspection tour, the deficiencies noted would be compared and a common understanding reached before making them known to the employer. At the second meeting, supervisory personnel from the three agencies involved considered the meaning of each standard and attempted to develop a yardstick for each of the general terms mentioned above.

Later at a training session, the grass root people making the inspections and evaluations are to be informed of the common denominators and of the procedures to be followed in 1970 in the hopes of avoiding the repetition of the 1969 situations.

VII. EMPLOYMENT AND SUPPLY OF AGRICULTURAL LABOR

A. SEASONAL FARM LABOR

The 1969 season was characterised by a surplus of labor, especially during the early part of the season. Cold, wet weather along the southwestern and western part of the state during June delayed the strawberry harvest from one to two weeks. To a lesser extent, it also adversely affected the growth of the asparagus crop. The adverse weather, combined with a large influx of free wheeling migrants into this area, created local surpluses of labor and problems associated with it. Warm weather during the latter part of the strawberry harvest compensated for the earlier lack of sufficient employment opportunity.

Excessive rains in the southcentral, southeastern, and the thumb areas of the State during spring and early summer delayed planting of all field and vegetable crops and thereby delayed the start of hoeing and harvest activities from one to two weeks and resulted in surplus labor in these areas. The use of herbicides on field beans and pickles, precision drill planting of beets, and mechanical beet thinners further aggravated the surplus labor problems in the thumb area. Many workers left for the western part of the state only to discover that a surplus of labor was also being experienced there.

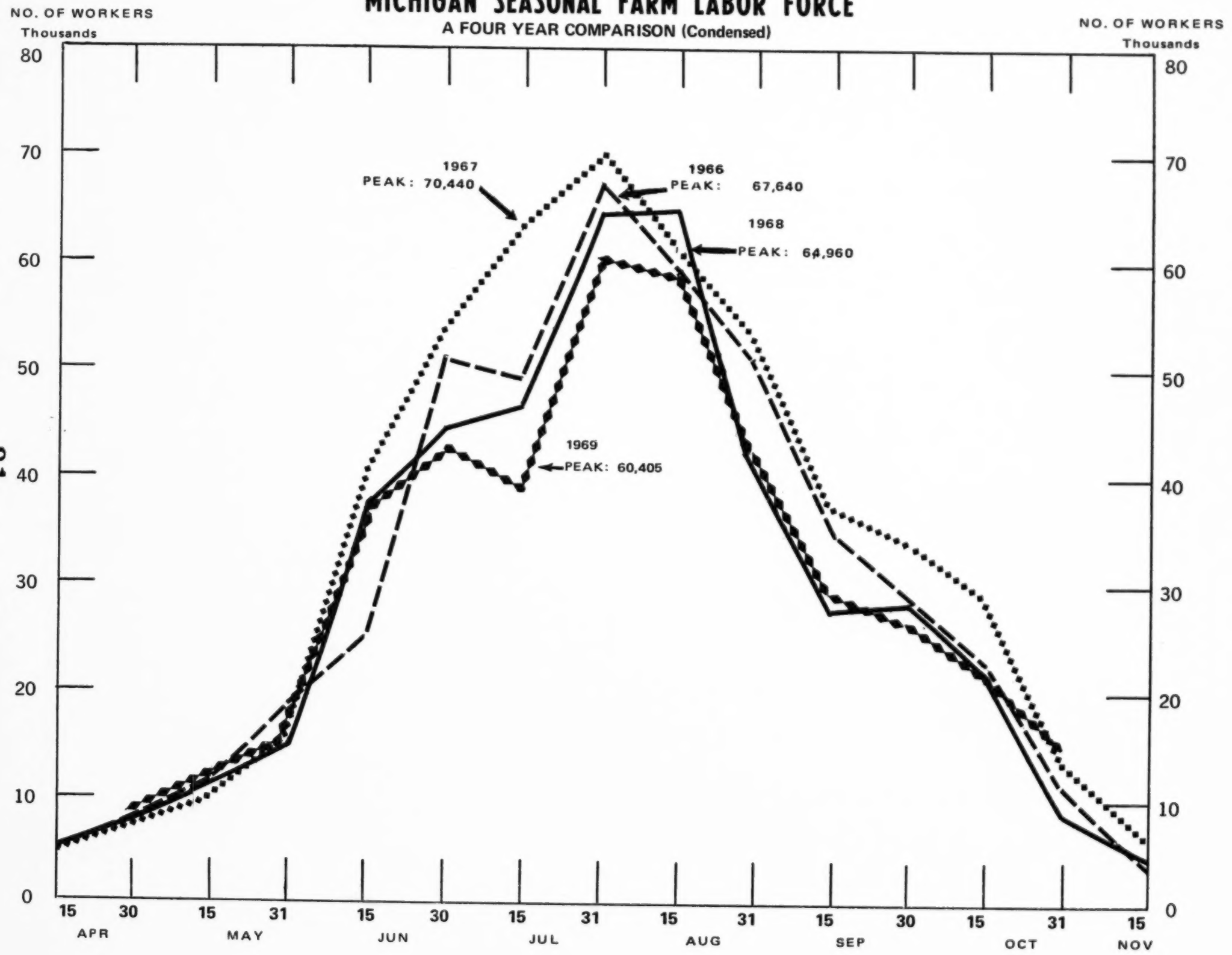
A similar labor surplus problem was encountered by cherry pickers in the west-central and northwestern areas of the state. Continuous rain hampered growers' attempts to control "shot hole" and "brown rot" in their orchards. A large influx of free wheeling labor moved into the cherry growing areas early and accentuated such problems as workers moving into housing that was not ready for occupancy and creating a need for growers to advance money to workers for living expenses or referral to social welfare agencies for assistance.

The employment of seasonal labor in Michigan during 1969 reached its peak towards the end of July with an estimated 60,400 seasonal workers reported as working on the July 31st report. This represents a 7 percent decrease from the previous year's peak, which occurred during the beginning of August. A peak employment of approximately 22,000 local workers occurred during the early part of August, down 11 percent from the 1968 peak. The period of greatest employment (peak) of non-local workers occurred during the latter part of July with a total of approximately 40,350 seasonal workers employed in the various agricultural activities throughout the state, a 6 percent drop from the 1968 peak.

Approximately 113,500 workers were employed at one time or another in the cultivation and harvest of Michigan's crops during the 1969 season. This represents a 16 percent drop from the previous year's figure of 134,300 workers. Many of these workers were employed in only one activity or quit before the completion of an activity, but most of them worked for the duration of one or two activities. Michigan sources supplied slightly over 57,000 workers, 50 percent of the total work force. An estimated 47,000 local workers were employed during the 1969 season, an 11 percent decrease from the 1968 total of 53,000 workers. Intrastate sources supplied approximately 10,500 workers, the same year, while interstate sources accounted for an estimated 56,000 workers, a 21 percent drop from the 1968 total of 70,700 workers. Although the majority of migrant labor in Michigan originated in three states (Texas, Florida, and Louisiana, in that order), some 28 other states and Puerto Rico contributed to the migrant labor pool.

MICHIGAN SEASONAL FARM LABOR FORCE

A FOUR YEAR COMPARISON (Condensed)



The following table gives a breakdown of seasonal farm employment and operations in Michigan in 1969:

SEASONAL AGRICULTURAL EMPLOYMENT AND OPERATIONS IN 1969

		Agricultural Employment 1/			Agricultural Operations 2/			
Date		Total Workers	Local Workers	Non-Local Workers	Refer-rals	Place-ments	Accept-ances	Employer Visits
Jan.	15	3,000	2,825	175	72	48	8	114
	31	3,100	2,900	200				
Feb.	15	3,500	3,300	200	214	121	26	388
	28	4,000	3,750	250				
Mar.	15	5,000	4,750	250	265	244	15	422
	31	5,200	4,680	520				
Apr.	15	6,042	5,267	775	667	602	86	687
	30	7,875	6,605	1,270				
May	15	11,655	8,690	2,965	1,684	1,120	72	965
	31	14,696	10,138	4,558				
June	15	36,295	14,196	22,099	7,422	7,031	502	1,506
	30	42,080	14,738	27,342				
July	15	39,832	17,190	22,640	26,309	23,976	1,531	2,426
	31	60,405	20,049	40,356				
Aug.	15	58,782	22,035	36,747	25,931	28,302	2,140	2,587
	31	41,102	18,460	22,642				
Sept.	15	27,952	13,655	14,297	8,795	9,390	573	1,718
	30	26,780	13,260	13,520				
Oct.	15	23,510	11,551	11,959	5,694	5,598	237	1,367
	31	14,685	7,845	6,840				
Nov.	15	5,290	3,915	1,375	1,600	1,828	72	446
	30	4,600	4,000	600				
Dec.	15	3,700	3,200	500	379	262	10	268
	31	3,500	3,200	300				

1/ *Employment figures represent inseason estimated on the last work day preceding the reporting date. Peak employment occurred near July 31, when over 60,405 workers (age 10-up) were employed in seasonal activities. Note that the figures for January 15, to March 15, and November 30 to December 31 are rough estimates since inseason reports are not required during this period.*

2/ *Referrals, placements, and applicant holding office acceptances include year-round workers.*

B. YEAR ROUND FARM LABOR

Year Round Farm Labor during 1969 was the object of study in several research projects and surveys. Unfortunately, none of these studies disclosed any major findings which were not known before. They merely reiterated some of the already established facts and confirmed a few others.

Two significant problems exist with farm operations and year-round labor. One problem is the wages paid to hired workers on farms are not competitive with those offered by the manufacturing industry. The discrepancy is so large that other compensatory benefits of farm life are nulified. According to a recent study conducted by a state university, a dairy farm worker earned an average $1,713 less than his counter-part in manufacturing and worked 884 more hours per year.

The other problem deals with the gross income of the farms. The question arises of how to raise the gross income of farms to a sufficient level (without a proportional rise in the expenses) in order to be able to offer competitive wage rates to workers while earning a fair return on capital investment. An increasing number of farmers are utilizing new or improved management techniques and automated or semi-automated machinery to meet this problem.

As a result of the continuous pressure for higher wages coupled with the rising cost of farm equipment and inflation, many small farm operators discontinued operations in 1969 while other farmers sold out or merged. Preliminary estimates by the U.S. Department of Agriculture indicate 2.2 percent decrease in the number of farms in Michigan from 89,000 to 87,000 farms in 1969. The total land in farms has also decreased 7% from 13,400,000 acres in 1968 to 13,200,000 acres in 1969. Part of this continuing trend is the increase in average size per farm in Michigan from 151 acres in 1968 to 152 acres per farm in 1969. This trend is expected to continue for the next few years until an optimum size is reached.

Although the total number of workers on farms in 1969 was less than in 1968, the demand for skilled year-round farm labor was still evident. The causes for the inability of supply to meet the demand for labor are multi-factored. Foremost among these is the unavailability of sufficiently skilled farm workers who are interested in the working conditions. The U.S. Department of Agriculture reported an average of approximately 115,000 family workers for the period from January through November of 1969, as compared with 120,000 workers in that same period in 1968, and 23,000 hired workers for the period from January through 1969, as compared to 27,000 workers in that same period in 1968.

As stated in the 1968 Annual Report, the use of technological innovations in farm operations has increased in 1969. More use of new farming techniques will be put in operation during 1970 to solve some of the problems that beset farm operators.

VIII. MECHANICAL AND TECHNOLOGICAL DEVELOPMENTS

Mechanical and technological developments in Michigan's agriculture have created a period of change and adjustment for those who depend upon it for their livelihood. The continuing transition from present practices will create certain unknowns about what will be wrought. Hopefully, though, with careful evaluation of the present and past developments and trends, what may be expected in the next few coming years may be more clearly understood.

In 1969, the increased used of mechanization to perform agricultural activities and a resulting decrease in the need for seasonal labor continued at an increased rate in comparison to the rate of the preceding three year period from 1966 to 1968. During the three year period, the lessening in the demand for seasonal hand labor was approximately 5%. In the four year period before this, 1962 to 1965, the decrease in demand was about 10%. The decrease in demand from 1968 to 1969 was 16%.

These differing rates can largely be attributed to the varying levels of practical implementation of mechanical and technological innovations. Practicality, of course, depends upon many variables. One, which will likely affect the increased use of mechanization during 1970, is the money market for agricultural loans. The money market for such loans is expected to be tight in 1970 and may forestall some growers from buying labor-saving equipment that they otherwise would purchase. Also, if there is a general recessionary trend in 1970, it can be expected that a larger supply of

seasonal hand labor will become more available than it has been in recent years. Although it is not expected that the trend of decreased use of seasonal hand labor will be reversed, these factors and a slight increase in tree fruit bearing acreage indicate that the decrease in employment in seasonal activities will probably range near 10% in 1970.

(However, it must be noted that the decrease in any one crop activity may vary from 5% to as high as 40%. Also, variances in crop conditions from year to year due to weather, which can create large yearly fluctuation in the number of agricultural seasonal labor employed, cannot be predicted in any pre-season forecast.)

A number of limiting factors still have to be solved if exclusive use of mechanization in a number of crop activities is to become economically profitable. For example, of the tart cherry orchards in the northwest area of the state, 20% are too hilly to be able to be harvested at present with the use of self-propelled or tractor mounted shakers. Also, a number of tart cherry growers in the state are able to mechanically harvest their crop if they so choose, yet they hand harvest it so that they may induce seasonal laborers to come to the farm where help is still needed in other agricultural activities which are not mechanized. One-over mechanical harvesting often means that there is a decrease in the yield per acre, and that a grower can still obtain a greater net return on his crop by using hand labor to pick it several times during the harvest season.

No doubt solutions will be found for these and other limitations, but it is doubtful that they will be solved in the period of a year or two. Rather, it is likely that there will be a gradual increase in the present trend towards mechanization for the next several years.

While no acute shortages of hand labor developed in Michigan field or orchard activities this year, there was a strong demand in some areas for workers in processing plants which was not completely filled. Also, a number of processing operations in the state are expanding their capacities. Therefore, some seasonal laborers might find themselves working in processing plants in 1970 although it may mean a decrease in family income since entire family units may not be fully employed.

It was estimated that between 55% and 60% of Michigan's tart cherry crop was harvested by mechanical shakers in 1969. About 10% of Michigan's processed tomato crop was harvested with the use of mechanical combines. Approximately 20% to 25% of the state's grape crop was reported as having been mechanically harvested. In the Saginaw Bay Area an estimated 1,000 fewer persons were employed in the hoeing and thinning of sugar beets due to the use of herbicides, space planting and mechanical thinners.

REPORTS OF OTHER DEVELOPMENTS FOLLOWS:

A. NEW APPLE PICK-UP MACHINE DEVELOPED

U.S.D.A. researchers at Michigan State University have developed an experimental apple pickup machine that will be introduced commercially by a Western Michigan implement manufacturer in time for use in the 1970 season.

The machine operates in a manner similar to that of a lawn sweeper. The apples are swept off the ground by rubber "fingers", on a cylinderical drum, and onto a conveyor which lifts the apples up to a bulk box that travels alongside the machine. The machine is operated by a power takeoff unit of a tractor.

Previous experimental models used steel prongs on a cylinderical drum to stab the fallen apples and then used flexible discs to pry the apples off the prongs.

It was stated that the new model is able to sweep up the apples without any further harm being done to them. Also, it was reported that it was able to pick up to two bushels per minute depending on the number of apples on the ground.

B. SWEET CHERRY SORTING MACHINE

Sweet cherries for processing as maraschinos must have well developed, firmly attached stems. This is also preferable for fresh market cherries, since the stems keep cherries from drying out in transit and at the market. Mechanical harvesting of the fruit results in a mixture of cherries with and without stems making it necessary to hand sort, a process which is both laborious and costly.

An A. R. S. agricultural engineer cooperating with a Michigan Agricultural experimental station engineer have developed an experimental separating machine. Tests of the machine show a 98 per cent efficiency in berries separated for maraschino cherries. This is 2 per cent higher than the minimum acceptable standard. The machine utilizes an aluminum drum with 1¼ inch holes drilled in staggered rows around its circumference. Cherries are fed into the drum's holes by an oscillating chute. The machine is designed so that the fruit with stems enter the holes fruit first with the stem extended outward. The stems of cherries are caught between the outside of the drum and a soft belt. Cherries without stems, not being held by the belt, drop into a flume which is located inside, and near the top of the drum. Cherries with stems, being held by the belt, are carried around the drum beyond the end of the belt where they drop into another flume and are carried away from the machine. Tests indicate that a machine with a drum 36 inches wide would separate from 625 to 1400 pounds per hour with less than 1 per cent of the separated fruit damaged as a result of the operation.

C. MECHANICAL GRAPE HARVESTING

There was a large increase in mechanical picking of grapes this past season as compared to the 1968 season. At least eight more machines were used this past season in Van Buren and Berrien Counties alone. The Hudson Umbrella system, the Geneva double curtain and a modified standard trellis were the main systems used to ready the vines for mechanical picking.

D. M.S.U. EXTENSION SERVICE ESTABLISHES FM COMMUNICATIONS NETWORK

The Michigan State University Agricultural Extension Service began a pioneer program in the use of FM Radio Communications last September to help provide County Extension agents with immediate answers to specific questions given them by farmers.

With the use of the system, it has been planned that farmers anywhere in the state should be able to receive knowledgeable advice to complicated technical questions within a matter of minutes directly from M.S.U.'s College of Agriculture and Natural Resources. The system was also designed to help extension agents plan their activities more effectively by being able to communicate immediately with two-way links between the field, the office, and M.S.U. in East Lansing.

The system has been installed in 12 counties in Southern and Central Lower Michigan. It is planned to expand the program to indlude the rest of the State.

E. INCREASING FRUIT BEARING SURFACE ON PEAR TREES

A Southwestern Michigan grower tested five acres of Bartlett Pear trees with a new method for opening up additional fruit bearing surface on the trees. Plastic twine fastened to the branches and tied to a continuous one-quarter inch wire running through the trunks of trees pulled them downward and spread the branches apart creating a "wall" effect along the rows of trees.

Compared with similar trees nearby the grower estimated the "wired" trees yielded from one-third to one-half more fruit.

F. WIRE CAGES FOR TOMATO PLANTS

A Southwestern Michigan vegetable grower has developed a method by which he is able to grow and harvest nearly all No. 1 grade fruit from his plants. The plants were grown upwards through the center of circular wire cages which stand about three feet high. The tomatoes were held up by the surrounding cage. Tomatoes grown in this manner over the last two seasons were reported to have had virtually no ground marks, blemishes or rot. Also, it was stated that the tomatoes had a good uniformity of color and produced a firmer ripe tomato which held up well during shipment to fresh markets.

The cages were made from 10-gauge reinforcement wire, and cost approximately 35 cents apiece to make by hand. The costs involved were less than the increased return from No. 1 grade tomatoes.

It was also noted that at least a half dozen other area growers who previously were tying vines to stakes changed to the use of the cage.

G. PLASTIC DRAINAGE TILE

The State of Michigan has authorized the use of flexible drainage tile for draining farm land for farmers. The plastic tile has several advantages over clay tile. Although the cost of the new tile is about the same cost as clay tile, it can be laid much quicker. This reduces the cost of installation. Also, the plastic tile can be laid in sandy subsoil where clay tile could not be used because it would not hold grade or even stay together. It comes in lengths of 250 feet and can be cut to size with a knife.

Plastic tile was first used in Ohio three years ago. Some of the tile has been used in Michigan on a trial basis. Inspection of the tile after several years of installation showed it to be practical for drainage useage.

H. ELECTRONIC SUGAR BEET THINNERS

Several implement manufacturers have introduced sugar beet thinning machines that use an electronic probe to search out plants plus an automatic thinning knife that has a built-in hesitation so that the machine will travel about two inches beyond the plant before blocking.

A six row machine reportedly can thin about two and one-half acres of beets an hour. With such a capacity, it would replace approximately 20 hand laborers. Row-units cost about $1,000.00 apiece plus another $1,000.00 for the machine's frame.

Simple blocker-weeder machines which were introduced several years ago cost about one-fifth as much but these were non-selective and removed a given percentage of all plants in a row.

With the rapidly increasing use of mechanical thinners, space planting, monogerm seeds, and herbicides, the use of hand labor for hoeing and thinning of sugar beets will become history.

I. TEN DOLLAR SLED HARVESTS ASPARAGUS

A Southwestern grower has been experimenting with a set-level sled for harvesting asparagus for the past two years. Due to the success of this innovation, several farmers in the area are adopting the idea for their own fields in order to reduce harvest labor costs. The cost per sled range from $10.00 to $20.00. The sled resembles a lawn mower grass catcher made of wood with common saw blades for cutting edges. Several sleds can be towed simultaneously over a field at a rapid pace. The blades cut off the asparagus at a pre-set level throwing the spears into the back of the sled's box. Growers, who have used the sled, report that the quality and quantity from this mechanical harvester is as good as that from an expensive mechanical harvester developed a few years ago. Although the quality is not as high as that harvested by hand labor, the savings in labor costs more than offset the loss of quality which is still high enough for processing standards.

IX. HUMAN RELATIONS

Although the field personnel of the Farm Placement and Rural Manpower Service are not trained social workers, their concern for human need often carries them beyond their normal responsibilities as placement specialists. Their assistance may be as routine as informing migrants about the types of employment services available to them and when, where, and how they may obtain them. Or, it may involve aid in finding clothing, food, shelter, or obtaining financial help when the need for such assitance is evident.

However, Farm Labor and Rural Manpower Service is only one agency among a number of governmental agencies and private groups or organizations who are interested in the welfare of migrants.

A. INTER-AGENCY E & D PROJECT

As part of an experimental and demonstration project, Farm Labor and Rural Manpower Service participated with other state, county, and private non-profit organizations in Berrien County in a program to coordinate assistance given to seasonal agricultural workers in the area. The goal of the Inter-Agency Migrant Center in Berrien Springs was to improve efficiency in providing needed services to seasonal workers and to curtail conflict or duplication of efforts by the various agencies and/or interested groups.

The Center provided a centralized location where information and assistance to workers and their families was being offered. After the interview revealed their needs, they were taken to the agency or group representative best suited to give them the needed aid. Participating in the project were: the County Social Services, Legal Aid, Tri-Cap, Department of Education, the Vocational Rehabilitation and Farm Labor and Rural Manpower Service, the Catholic Bishops Committee, the Migrant Ministry and other interested groups.

Within its two month period of operation in 1969, approximately 1100 referrals were made by the center.

B. EDUCATION & DAY CARE CENTERS

The Economic Opportunity Act provided some funds for migrant day care centers operated by community school districts under the direction of the Michigan Department of Education. Private non-profit groups also operated day care centers under the Head Start program and other educational programs with similar grants. Several school systems operated and funded their own educational day programs for migrant children. Virtually all areas where migrant agricultural labor was employed had day care centers and other educational programs for children 3 months through 15 years.

Basic education for adult migrants was offered at the Muskegon and Kalamazoo Skill Centers which operated as a part of a coordinated Manpower Development Training program by United Migrants for Opportunity, Inc. (U.M.O.I.) and the Michigan Employment Security Commission. In the Traverse City area adult and teenage evening classes in basic education were held at four area farms in addition to a local school in an effort to make educational opportunities more accessible to the migrants while they were in the area.

C. HEALTH

All areas having significant concentrations of migrants had programs to provide them with some health services. Most often it was in the form of health clinics for migrants operated by county health departments. Other such clinics were operated by non-profit groups receiving Federal O.E.O. grants. The success of some clinics can be largely attributed to the volunteer efforts of physicians, nurses, and interested citizens. However, shortage of medics in rural areas had serious limiting effects on the the extent of services available to all of the rural population.

Act 321 of Public Acts of 1966 amended section 66a of A280 of Michigan law makes hospitalization available to needy migrants with 100% state reimbursement. Any person temporarily in the state without intention to stay is eligible for such migrant hospitalization benefits. In May 1969, migrant families with children under 21 became eligible for hospitalization up to 30 days due to additional Federal supplementation.

D. WELFARE

Numerous public agencies and private organizations were involved in providing the welfare assistance to all seasonal agricultural workers during the past year. Some of them were involved with such welfare aid were: county social services, Council of Churches, United Migrants for Opportunity, Inc., the Migrant Ministry, the Mexican Apostolate, Legal Aid, Vista, Catholic Social Services, Catholic Bishops Committee, St. Vincent DePaul Society, the American Friends Service Committee, Neighborhood Youth Corps, the Salvation Army, LaSed, La Raza Unida, the Hispanic American Ministry, and other community action centers.

The welfare activities of these groups ranged from providing needed food and clothing to assistance in securing needed housing for those settling out of the migrant stream.

E. EMERGENCY ASSISTANCE GIVEN

Mr. T. and family arrived at the Saginaw Farm Labor and Rural Manpower Service Office in mid-July with no money, food, or housing and their automobile in poor condition. A Farm Placement Specialist assisted the family in locating housing, food, utensils, dishes, and most important of all, employment. The family of ten (with eight workers) were employed by six employers for a total of approximately 240 man days.

Gross earnings for the six-week harvest period exceeded $3,000.

Mr. S. arrived at the Saginaw Farm Labor and Rural Manpower Service Office destitute in early July and without any transportation. Mr. G. and family from Texas also arrived destitute with their aged car having broken down just two blocks from the office. With the assistance of a Farm Placement Specialist each of the above was taken to various agencies for supportive services. Mr. S. received food, housing, and employment. Mr. G. and family received food and housing from an unknown benefactor living near where the car broke down. From the local Social Services Office he also received a cash allowance for auto repair and gasoline expenses to Benton Harbor where the older members of the family were employed in the cherry harvest.

Mr. F. of Colorado and Mr. R. of Washington arrived in Michigan destitute and without transportation. A local mission provided them with food and shelter for three days. The local office representative developed jobs for both of them. Social Services supplied bus fare for Mr. F. to Flint where he found employment on a nearby farm as a year round dairy hand. Mr. R. was provided bus fare to Grand Rapids for employment in the apple harvest.

F. SETTLING OUT OF THE MIGRANT STREAM

Last fall four Mexican-American families in the Saginaw area moved into their own new, six-room homes financed with low interest loans from the Federal Farm Home Administration agency. The houses were built with their own labor and the labor of members of several religious groups. An area contractor volunteered to spend his weekends inspecting the housing during the construction to make sure they met local building codes and professional standards. To qualify for the loan, each house, including land, had to cost less than $10,000.00. The families which have a total of 15 children, are former migrant workers who chose to stay in the area and gradually upgrade their living standards. The husbands are now working in metal working industry or area peat farming.

The S. family consists of husband, wife, and four children. They decided that they wish to settle out of the migrant stream and live in Michigan. Mr. and Mrs. S. came to the local Farm Labor and Rural Manpower Service Office after they had exhausted their resources trying to find a home and employment. The office personnel assisted them in finding a home requiring only a small down payment and furniture for the house in addition to needed food money during the crucial period. The husband was placed on a steady job while several others in the family were employed by a nursery and the eldest son was aided in obtaining a summer job with the city.

The P. family consisted of a husband, wife and eight children. They decided, after many years of migrating, to settle down in Michigan. An employer offered them a job and a house to live in year round but did not keep his promise.Then the world came apart for the family as a child needed an operation; a pregnant daughter needed medical attention and the other adult members of the family found themselves without a job. They spent the last penny they earned while picking pickles and the cold weather came while they were living in the unheated housing of the pickle company with a convalescing girl and two little babies. The Rural Manpower Office with the cooperation of other government agencies referred the 13-year old girl for a leg operation and referred the pregnant woman for a medical check-up and care, located a house for the family, and developed job openings for the adults.